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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,960	07/28/2003	Carlos Bonilla	200309109-1	6175

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EXAMINER

DAO, THUY CHAN

ART UNIT PAPER NUMBER

2192

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/628,960	Applicant(s) BONILLA, CARLOS	
	Examiner Thuy Dao	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application filed on July 28, 2003.
2. Claims 1-20 have been examined.

Priority

3. The priority date considered for this application is July 28, 2003.

Drawings

4. The drawings are objected to because minor informality: FIG. 1A, block 12 should be - -Wrapping native [language] language code ...- -.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The use of the trademarks JAVA.TM. (page 1), JVM.TM. (page 4)... have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

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Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

6. The acronym JVM.TM. (page 4, line 1) should be spelled out at the first appearance in the specification.

Claim Objections

7. Claims 5 and 9 are objected to because of the following informalities: claim 5 recited the limitations "A Java native interface testing system", which are not consistent with the recited limitations in claim 9 "A Java Native Language Interface test method".

Claim 5 is considered to read as - -A Java [n]Native [i]Interface testing system...-- and claim 9 as - -A Java Native [Language] Interface test method...--.

8. Claims 6-8 are objected to because of minor informalities. Claims 6-8 are considered to read as - -The Java Native Interface testing system of claim 5 ... --.

9. Claims 10-20 are objected to because of minor informalities. Claims 10-20 are considered to read as - -The [A] Java Native Interface test method of claim ... - -.

10. Claim 16 is objected to because of minor informalities. Line 5, "said JNI" is considered to read as - -said Java Native Interface- -.

Appropriate correction is required.

Claim Rejections – 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,826,746 to Evans et al. (hereinafter "Evans").

Claim 1:

Evans discloses *an emulation and native language interface test method comprising:*

initializing an emulation language virtual machine (e.g., FIG. 1, JVM 16, col.5: 7-12);

wrapping native language code in a simulation test macro which creates simulated interfacing problems (e.g., col.1: 7-11; col.2: 15-22); and

examining reaction to said simulated interfacing problems when an emulation language application is run (e.g., FIG. 6, Interface Code Analysis Tool 41 (ICAT2) with event handlers 61-67; GUI of ICAT, ICAT2 to set breakpoints, step applications, examine application stack and variables, col.2: 33-47).

Claim 2:

The rejection of claim 1 is incorporated. Evans also discloses *said emulation language virtual machine creates a runtime environment and said runtime environment can include a class loader subsystem and an execution engine (e.g., FIG. 1, class loader subsystem in JVM 16, engine 13, col.5: 2-17).*

Claim 3:

The rejection of claim 1 is incorporated. Evans also discloses *said simulated test problems include simulations of error conditions associated with a native language code method attempt to respond to a call from emulation*

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language code (e.g., FIG. 6, ICAT2 with event handlers 61-67; GUI of ICAT, ICAT2 to set breakpoints, step applications, examine application stack and variables, col.2: 33-47).

Claim 4:

The rejection of claim 1 is incorporated. Evans also discloses *forwarding an indication that there is a insufficient memory allocation exception to a native language method attempting to ascertain an indication of a memory location for information associated with a native language function* (e.g., col.8: 1-8, Memory Usage Information).

Claim 5:

Evans discloses *a Java Native Interface testing system comprising:*

means for communicating information (e.g., FIG. 6, Interface Code Analysis Tool 41 (ICAT2) with event handlers 61-67; GUI of ICAT, ICAT2 to set breakpoints, step applications, examine application stack and variables, col.2: 33-47);

means for processing said information, including instructions for testing a Java Native Interface, said means for processing said information coupled to said means for communicating information (e.g., col.1: 7-11; col.2: 15-22); and

means for storing said information, including said instructions for testing said Java Native Interface, said means for storing said information coupled to said means for communicating information (e.g., col.6: 52-57; col.8: 15-19; col.8: 25-col.9: 67).

Claim 6:

The rejection of claim 5 is incorporated. Evans also discloses *said means for processing performs a Java Native Interface test method* (e.g., FIG. 1, ICAT2 Probe 41, col.5: 2-12).

Claim 7:

The rejection of claim 5 is incorporated. Evans also discloses *an interface testing macro module* (e.g., FIG. 1, JDaemon DLL 14, col. 5: 5-8; col.2: 15-22)

Claim 8:

The rejection of claim 5 is incorporated. Evans also discloses *emulating a Java virtual machine* (e.g., FIG. 15, JVM 16, col.4: 40-51).

Claim 9:

Evans discloses *a Java Native Interface test method comprising:*

investigating Java Native Interface test mode status (e.g., col.5: 62 – col.6: 5);

running a Java application with simulated Java Native Interface problems if said Java Native Interface test mode is enabled (e.g., FIG. 1, JVM 16, col.5: 7-12; col.1: 7-11; col.2: 15-22); and

initiating a call to a Java Native Interface function directly without said simulated Java Native Interface problems if said Java Native Interface test mode is not enabled (e.g., col.1: 32-37; col.1; 66 – col.2: 5).

Claim 10:

The rejection of claim 9 is incorporated. Evans also discloses *said Java Native Interface test mode status indicator indicates if said Java Native Interface test mode status is enabled* (e.g., FIG. 1, JVM 16, col.5: 7-12; col.1: 7-11; col.2: 15-22).

Claim 11:

The rejection of claim 9 is incorporated. Evans also discloses *said Java Native Interface test mode status indicator is a flag wherein a state of said flag*

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indicates if said Java Native Interface test mode status is set (e.g., col.5: 62 – col.6: 5).

Claim 12:

The rejection of claim 9 is incorporated. Evans also discloses *a register value indicates said Java Native Interface test mode status (e.g., col.5: 62 – col.6: 5).*

Claim 13:

The rejection of claim 9 is incorporated. Evans also discloses *identifying indications of Java Native Interface code trouble associated with out of memory situations (e.g., col.8: 1-8, Memory Usage Information).*

Claim 14:

The rejection of claim 9 is incorporated. Evans also discloses *a Java Native Interface problem simulation process is performed to simulate Java Native Interface problems (e.g., col.4: 40-51).*

Claim 15:

The rejection of claim 9 is incorporated. Evans also discloses:

- determining a Java Native Interface problem simulation occurrence level (e.g., col.7: 52-63);*
- introducing simulation randomness (e.g., col.6: 10-21);*
- performing an analysis whether to initiate a simulation of Java Native Interface problem; calling a Java Native Interface memory allocation function normally (e.g., col.8: 2-8);*
- forwarding a Java Native Interface problem indicator automatically;*
- and implementing a reaction to the Java Native Interface problem indication (e.g., col.8: 63 – col.9: 14).*

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Claim 16:

The rejection of intervening claim 15 is incorporated. Evans also discloses:

looking up a predefined Java Native Interface problem simulation occurrence level (e.g., col.8: 2-8);

generating a random value (e.g., col.6: 10-21); and

correlating said random value to said JNI problem simulation occurrence level (e.g., col.7: 52-63).

Claim 17:

The rejection of intervening claim 16 is incorporated. Evans also discloses:

comparing said randomly generated value to said Java Native Interface problem simulation occurrence level (e.g., col.6: 10-21); and

initiating a simulation of a Java Native Interface problem if said generated value from is less than said Java Native Interface problem simulation occurrence level (e.g., col.8: 63 – col.9: 14).

Claim 18:

The rejection of intervening claim 16 is incorporated. Evans also discloses *initiating a controlled shut down (e.g., col.5; 62 – col.6: 5).*

Claim 19:

The rejection of intervening claim 16 is incorporated. Evans also discloses *clearing a system and canceling information inventory collections that is occupying memory space (e.g., col.8: 2-8).*

Claim 20:

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The rejection of intervening claim 16 is incorporated. Evans also discloses *providing an indication of the Java Native Interface problem to a user* (e.g., col.8: 63 – col.9: 14).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Patent No. 5,901,315 discloses a method and a software tool to debug a "target" application that has been written in Java and extended using native-method dynamic load library functions and simultaneously debug a Java application having C/C++ application code associated therewith (e.g., column 1: 46-52).

14. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on Monday – Friday from 6:30AM to 3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private

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PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao

A handwritten signature in black ink, appearing to read 'Tuan Dam', with a stylized, flowing script.

TUAN DAM
SUPERVISORY PATENT EXAMINER